

Claims

1. A textile material having a base structure (10) comprising fibres (12, 14) or a film base-structure (76), characterised in that the base structure (10; 76) supports a functional layer (18; 78) on at least one of its sides.

10 2. A textile material according to Claim 1, characterised in that the functional layer (18) has spaced sub-regions (72).

15 3. A textile material according to Claim 1 or 2, characterised in that the functional layer (18; 78) preferably comprises spherical particles (22; 82).

20 4. A textile material according to Claim 3, characterised in that the particles (22) are solid.

5. A textile material according to Claim 3 or 4, characterised in that the particles (22) include at least one embedded active substance (26).

25 6. A textile material according to Claim 5, characterised in that the active substance (26) is provided near to the surface of the particles (22).

7. A textile material according to one of Claims 3 to 6, characterised in that the particles (22) are hollow.

30 8. A textile material according to Claim 7, characterised in that an active-substance fluid (28) is arranged inside at least some of the hollow particles (22).

9. A textile material according to Claim 8,
characterised in that the particles (22) are
microcapsules.

5 10. A textile material according to Claim 8 or 9,
characterised in that amongst the particles (22)
there are those whereof the wall material differs in
terms of its resistance to environmental influences,
in particular pressure, moisture and temperature.

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11. A textile material according to one of Claims 8 to
10, characterised in that amongst the particles (22)
there are those which differ in terms of the
thickness of their wall material.

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12. A textile material according to one of Claims 8 to
11, characterised in that amongst the particles (22)
there are those which have a wall having at least two
layers (22a, 22b) which differ in terms of their
20 resistance to environmental parameters.

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13. A textile material according to one of Claims 8 to
12, characterised in that amongst the particles (22)
there are those which differ in terms of their
25 diameter.

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14. A textile material according to one of Claims 3 to
13, characterised in that the particles (22; 82) are
connected to the base structure (10; 76) by a bonding
30 agent (20; 80).

15. A textile material according to one of Claims 3 to
13, characterised in that the particles (22) are
applied to the base structure (10; 76) when their
35 outer surface is in an adhesive condition.

16. A textile material according to one of Claims 1 to 15, characterised in that the functional layer (18) has spaced fibres (74), which are incorporated in the base structure (10) such that they project beyond the 5 surface thereof on at least one side.

17. A textile material according to one of Claims 1 to 16, characterised in that the functional layer (18; 78) has a material which glides over skin with a low 10 degree of friction.

18. A textile material according to one of Claims 3 to 17, characterised in that amongst the particles (22) there are those which are selected from the following 15 group of materials: ceramics materials, silicone elastomers, polyurethanes, nitrile rubbers, chloroprene rubbers, polyvinyl alcohols, silicones, ethylene/vinyl-acetate polymers, acrylic resins.

20 19. A textile material according to one of Claims 3 to 18, characterised in that the particles (22) have a diameter of between 2 μm and 2,000 μm , preferably between 2 μm and 100 μm , and preferably between 2 μm and 10 μm . 25

20. A textile material according to one of Claims 1 to 19, characterised in that the functional layer (18; 78) may be dissolved by water and/or a solvent.

30 21. A process for manufacturing a textile material according to one of Claims 1 to 20, characterised in that at least part of the functional layer (18; 78) is applied to the base structure (10; 76) in a liquid condition using an application roller (46). 35

22. A process according to Claim 21, characterised in that an application roller (46) is used which has a compliant circumferential layer (48).

5 23. A process according to Claim 21, characterised in that a circumferential layer (48) is used which has a foam structure.

10 24. A process according to Claim 21, characterised in that an application roller (46) is used which is constructed as a rotary screen-printing roller.

15 25. A process for manufacturing a textile material according to one of Claims 3 to 20, characterised in that at least some of the particles (22; 78) are mixed with carrier air in an mixing device (56), and the particle/air mixture (54) obtained in this way is blown against the base structure (10; 76).

20 26. A process for manufacturing a textile material according to one of Claims 3 to 20, characterised in that at least some of the particles (22; 78) are mixed with a bonding agent, and the particle/bonding-agent mixture obtained in this way is sprayed against the base structure (10; 76).

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